

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013405**Date Inspected:** 07-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Hua Jie/Zhou Cheng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

Bay#19

During random in process inspection of bike path BK004A-001 and BK004A-007, this QA inspector observed that ZPMC personal performing base metal repair. Base metal repair was performed by SMAW welding process. After removing the closure plate, interior diaphragm and horizontal stiffeners from plates, BKPL1A and BKPL2A by carbon arc gouging, ZPMC personal performed MT inspection and found indications. That locations requires a base metal repair. The plate numbers and weld repair reports (WRR) are identified as:

BK004A-001:

BKPL1A and BKPL2A- WRR# B-WR11470

Welder is identified as 062814 (3G). ZPMC QC is identified as Zhou Cheng. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-1G(1F)- Repair.

BK004A-007:

BKPL1A and BKPL2A- WRR# B-WR11469

Welder is identified as 062814 (3G). ZPMC QC is identified as Zhou Cheng. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-1G(1F)- Repair.

For further information, please see the attached pictures below.

Seg9CE

# WELDING INSPECTION REPORT

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During the Quality Assurance Ultrasonic Testing (UT) review of weld located on Segment9CE, this Quality Assurance Inspector (QA) discovered the following issue:

- One (1) Rejectable Class “A” indication measuring approximately 25mm in length.
- The indication rating is +9dB.
- The weld is identified as Seg054A-006 @ Panel Point (PP)-077~078.
- The nominal thickness of the bottom plate is 20mm.
- The Weld is a complete joint penetration (CJP) Butt Weld joining the Bottom Plate. (BP) 72A to BP126A.
- The “Y” location is approximately 5130 mm from edge of bottom plate to PP77 from west side.
- The indication is clearly marked by QA on/near the weld.
- This weld is designated as Non Seismic Performance Critical Member (Non SPCM).

Please see incident report on this date.

## Segment9CE

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG Components. The weld designations reviewed are as follows:

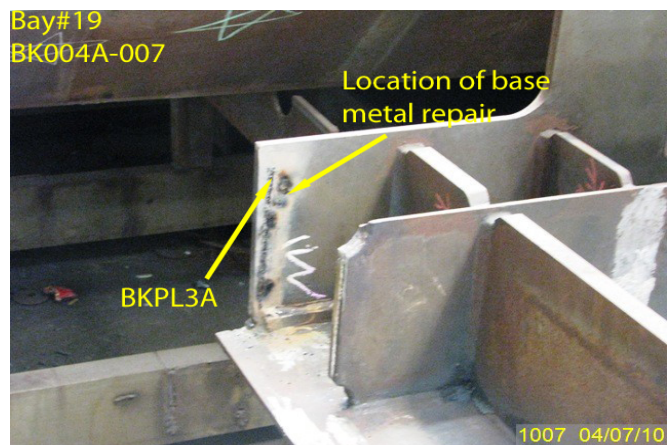
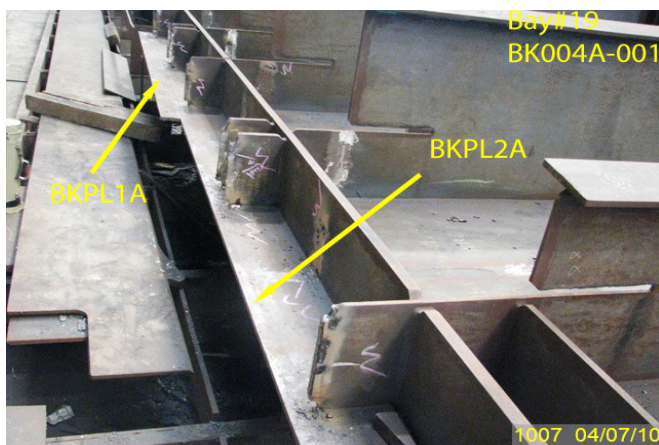
- (Seg054\*-001~010)
- (Seg054A-006)- Rejectable indication found.

## Bay#19

SAW welding of weld joint BK004A1-016-009 located on BK004A-016. Welder is identified as 062816 (1G). ZPMC QC is identified as Johu Cheng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

SAW welding of weld joint BK004A1-017-009 located on BK004A-016. Welder is identified as 062816 (1G). ZPMC QC is identified as Johu Cheng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

Unless otherwise noted, all observed on this date appeared to generally comply with applicable contract documents.

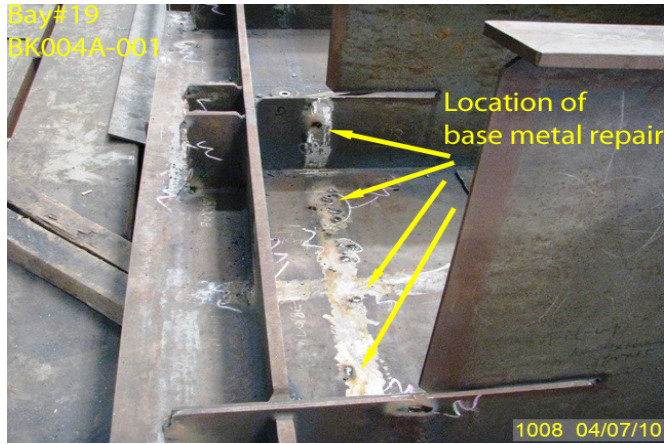


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## WELDING INSPECTION REPORT

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### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Patel,Hiranch	Quality Assurance Inspector
<b>Reviewed By:</b>	McClendon,Timothy	QA Reviewer

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